

What is claimed is:

1. A composite plastic for absorbing volatile organic compounds comprising a thermoset resin and a cellulosic material, said cellulosic material comprising lignin in about 10 to about 50 weight per cent, produced by mixing the
5 cellulosic material with the liquid resin before curing.
2. The composite plastic of claim 1 wherein said cellulosic material comprises less than about 15% water.
3. The composite plastic of claim 1 wherein the particle size of said cellulosic material is less than about 80 mesh.
- 10 4. The composite plastic of claim 1 comprising about one part of said cellulosic material to about 0.25 to about 30 parts of said polymeric resin.
5. The composite plastic of claim 1 additionally comprising a coating of said cellulosic material applied to the wet surface of said resin.
6. A molded article comprised of the composite plastic of claim 1.
- 15 7. In a method of molding plastic articles using a thermoset resin, the improvement comprising adding a cellulosic material to the resin before curing to reduce emissions of volatile organic compounds.
8. The improved method of claim 9 wherein said cellulosic material additionally comprises between about 10 and about 50 weight per cent of lignin.
- 20 9. The improved method of claim 7 additionally comprising applying a coating of the cellulosic material over the wet mixture of cellulosic material and resin.
10. The improved method of claim 7 wherein the resin is a styrene resin and the coating of cellulosic material is applied no later than about ten minutes prior to the onset of the exothermic reaction.
- 25 11. The improved method of claim 10 wherein the cellulosic material is applied prior to the onset of polymerization of the resin.
12. The improved method of claim 7 additionally comprising accelerating the curing of the resin.

13. The improved method of claim 12 additionally comprising limiting the temperature at which the resin cures.

14. The improved method of claim 7 additionally comprising limiting the temperature at which the resin cures.

5 15. A molded plastic article made by the process of claim 7.

16. The improved method of claim 8 wherein said cellulosic material is selected from the group consisting of cotton burrs, cotton stalks, flax, hemp, jute, cotton seed, rice hulls, wheat straw, corn stalks, peanut shells, sunflower shells, sunflower stalks, sugar cane, wood flour, wood pulp, sawdust, wood chips, tree bark,
10 and mixtures thereof.

17. The improved method of claim 7 wherein said cellulosic material comprises approximately equal parts of particles passing through a 30 mesh screen and particles passing through an 80 mesh screen.

18. The improved method of claim 7 wherein said cellulosic material
15 comprises particles in sizes up to approximately 80 mesh.

19. The improved method of claim 7 additionally comprising absorbing lignin onto the cellulosic material.

20. The improved method of claim 7 additionally comprising absorbing onto the cellulosic material one or more primary precursors of lignin, trans-coniferyl, trans-synaptyl, and trans-p-coumaryl alcohol.
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21. In a method of adsorbing volatile organic compounds produced during curing of resin systems, the improvement comprising adsorbing volatile organic compounds by contacting the process air stream with a cellulosic material.

22. The method of claim 21 wherein the cellulosic material is
25 preconditioned before adding to the polymeric resin by saturating the cellulosic material with the resin and then desorbing the resin from the saturated cellulosic material.